

HBG-60 SERIES

HBG-60 High Bay Light LED Driver



- Wide Input Voltage 90 to 277VAC, 47 to 63Hz
- Over Voltage / Short Circuit / Over Temperature Protection
- High Efficiency (up to 91%), Active Power Factor Correction (PFC)
- IP67 Waterproof Rating, Fully isolated
- Comply to worldwide safety regulations for lighting
- Cooling by free air convection
- Suitable for LED lighting & moving sign applications, for dry / damp / wet locations

5 Year Warranty

Approvals: IP67  

SPECIFICATION

| Part Number | HBG-60-36 | HBG-60-48 | HBG-60-60 | HBG-60-72 | |
|--------------|--------------------------------|--|---------------------|------------|------------|
| OUTPUT | DC VOLTAGE | 27~36Vdc | 36~48Vdc | 48~60Vdc | 60~72Vdc |
| | CONSTANT CURRENT REGION Note.4 | 2.2~1.6A | 1.6~1.2A | 1.2~1.0A | 1.2~0.8A |
| | RATED POWER | 60W | | | |
| | RIPPLE & NOISE(max.) Note.2 | 2000mA Max | 1500mA Max | 1200mA Max | 1000mA Max |
| | CURRENT TOLERANCE Note.3 | ±3.0% | | | |
| | LINE REGULATION | ±3.0% | | | |
| | LOAD REGULATION | ±3.0% | | | |
| | SETUP, RISE TIME(Typ.) Note.7 | 300ms 230VAC at full load | | | |
| INPUT | VOLTAGE RANGE Note.5 | 90 ~277VAC | | | |
| | FREQUENCY RANGE | 47 ~ 63Hz | | | |
| | POWER FACTOR(Typ.) | >0.98 at 100Vac&full load; >0.95 at 230Vac&full load | | | |
| | EFFICIENCY(Typ.) | 88% | 89% | 90% | 91% |
| | AC CURRENT(Typ.) | 0.58A/115VAC | 0.29A/230VAC | | |
| | INRUSH CURRENT(Typ.) | COLD START 40A (Twidth=270us measured at 50% Ipeak) at 230VAC | | | |
| | LEAKAGE CURRENT | <0.75mA/265VAC | | | |
| PROTECTION | OVER CURRENT Note.4 | 95 ~ 108% Protection type: Constant current limiting, recovers automatically after fault condition is removed | | | |
| | SHORT CURRENT | Hiccup mode, recovers automatically after fault condition is removed | | | |
| | OVER VOLTAGE | >42V | >56V | >68v | >80V |
| | | Protection type: Hiccup mode, recovers automatically after fault condition is removed | | | |
| | OVER TEMP. | Hiccup mode, recovers automatically after fault condition is removed | | | |
| ENVIRONMENT | WORKING TEMP. | -35 ~ +70℃ (Refer to "Derating Curve") | | | |
| | WORKING HUMIDITY | 10 ~ 100% RH non-condensing | | | |
| | STORAGE TEMP., HUMIDITY | -40 ~ +85℃, 5 ~ 100% RH | | | |
| | TEMP. COEFFICIENT | ±0.03%/℃ (0~50℃) | | | |
| | VIBRATION | 10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes | | | |
| SAFETY & EMC | SATETY STANDARDS Note.6 | UL8750, UL935, UL1012, CSA-C22.2 No.107.1, EN61347-1, EN61347-2-13 | | | |
| | WITHSTAND VOLTAGE | I/P – O/P: 3.75kVAC,I/P-FG: 2KVAC | | | |
| | ISOLATION RESISTANCE | I/P – O/P: 100M Ohms / 500VDC /25℃ / 70% RH | | | |
| | EMC EMISSION | Compliance to EN55015, EN61000-3-2 Class C (≥60% load); EN61000-3-3 | | | |
| | EMC IMMUNITY | Compliance to EN61000-4-2,3,4,5,6,8,11; EN61547, EN55024, light industry level (surge 2kV), criteria A | | | |
| OTHERS | MTBF | 200khrs min. | MIL-HDBK-217F (25℃) | | |
| | DIMENSIION | 110*64MM(L*W*H) | | | |
| | PACKING | 380±10g | | | |

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| NOTE | <ol style="list-style-type: none"> 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Tolerance: includes set up tolerance, line regulation & load regulation. 4. Please refer to "DRIVING METHODS OF LED MODULE". 5. Derating may be needed under low input voltages. Please check the static characteristics for details. 6. Suitable for indoor use or outdoor use without direct sunlight exposure. Please avoid immerse in the water over 30 minutes. 7. Length of set up time is measured at cold first start. Turning ON/OFF the power supply may lead to increase of the set up time. 8. The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufactures must re-qualify EMC DIRECTIVE on the complete installation again. 9. Direct connecting to LEDs is suggested, but is not suitable for using additional drivers. 10. To fulfill requirements of the latest ERP regulation for lighting fixtures, this LED power supply can only be used behind switch without permanently connected to the mains. |
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Derating Curve

